WHAT IS CLAIMED IS:

1. A preliminary member of an optical device component with optical fiber comprising a long capillary tube made of glass or crystallized glass and an optical fiber inserted and fixed in an inner hole of the long capillary tube,

the preliminary member will produce, by cutting, a plurality of short capillary tubes with optical fibers each of which composes an optical device component to be connected to an optical connector.

2. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the overall length thereof is 20mm or more.

3. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the long capillary tube is made of glass or crystallized glass having a coefficient of linear expansion less than $7 \times 10^{-6}/K$.

4. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the long capillary tube is made of glass or crystallized glass which allows, at a thickness of 1mm, light having a wavelength of 350nm-500nm

to penetrate therethrough at 50% or more, and wherein the optical fiber is fixed in an inner hole of the long capillary tube with an adhesive, the adhesive being an ultraviolet-curing adhesive.

5. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the long capillary tube is made of crystallized glass which has composition of 55-72% of SiO_2, 16-30% of Al_2O_3, 1.5-2.8% of Li_2O, 0-2.5% of MgO, 1.3-5.0% of TiO_2, 0-4% of ZrO_2, 2.0-9% of TiO_2+ZrO_2, 2.1-10% of K_2O, 0-10% of ZnO, 0-6% of BaO, 0-4% of CaO, 0-7% of B_2O_3, 0-4% of Na_2O, 0-0.9% of P_2O_5, 0-3% of As_2O_3, and 0-3% of Sb_2O_3 based on percentage by mass, and where a β-spodumene solid solution or a β-silica solid solution has been deposited at 30-70% by volume as the main crystals.

6. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the long capillary tube is made of crystallized glass which allows, at a thickness of 1mm, light having a wavelength of 700nm-2500nm to penetrate therethrough at 30% or more.

7. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the long capillary

tube is manufactured by a drawing formation method.

8. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the long capillary tube comprises a flare portion at an end portion of the inner hole for guiding the optical fiber.

9. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the long capillary tube has mechanical strength which has been enhanced by creating a compressive stress layer on the surface thereof.

10. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein an external surface of the long capillary tube is polygonal.

11. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein an external surface of the long capillary tube is cylindrical and provided with a flat portion or a groove portion extending in the longitudinal direction.

12. A preliminary member of an optical device component with optical fiber as set forth in Claim 1, wherein the optical device

component is a component for an optical fixed attenuator and the optical fiber has a predetermined light attenuation factor.

13. A method for manufacturing a preliminary member of an optical device component with optical fiber, the preliminary member will produce, by cutting, a plurality of short capillary tubes with optical fibers each of which composes an optical device component to be connected to an optical connector, comprising the steps of:

manufacturing a long capillary tube by forming softened glass or crystallized glass;

providing a substantially conical flare portion at an end portion of the long capillary tube for guiding the optical fiber to an inner hole of the long capillary tube;

filling an adhesive into the inner hole of the long capillary tube;

inserting a long optical fiber whose covering has been removed into the inner hole through the flare portion; and

curing the adhesive to fix the optical fiber in the long capillary tube.

14. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in

Claim 13, wherein a compressive stress layer is formed on the surface of the long capillary tube by a quenching method.

15. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein a compressive stress layer is formed on the surface of the said long capillary tube by an ion exchanging method.

16. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein the substantially conical flare portion is formed by cutting an end face of the long capillary tube around the center of the inner hole by a rotating tool whose front end provided with abrasive particles has an angle of 45-120°.

17. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein the substantially conical flare portion is formed by immersing the end portion of the long capillary tube into a glass corrosive solution while protecting the outer surface of the long capillary tube.

18. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein the flare portion is fitted to the end portion of the long capillary tube by butting the end portion of the long capillary tube and one end of a capillary tube having a substantially conical flare portion at the other end thereof with each other in a split sleeve to align the inner hole of the long capillary tube and an inner hole of the capillary tube with each other.

19. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein an adhesive heap is formed when the adhesive is filled into the inner hole of the long capillary tube, the adhesive heap including no air bubbles and fills at least the flare portion.

20. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 19, wherein the adhesive heap is supported by a transparent member, and wherein the optical fiber is inserted into the inner hole of the long capillary tube while observing the optical fiber

21. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein the surface of the long optical fiber whose covering has been removed is cleaned.

22. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein the long capillary tube is made of crystallized glass which allows, at a thickness of 1mm, light having a wavelength of 350nm-500nm to penetrate therethrough at 50% or more, and a photo-curing adhesive is filled in the inner hole of the long capillary tube, and wherein after inserting a long optical fiber whose covering has been removed into the inner hole of the long capillary tube through the flare portion, the adhesive is cured by exposure to light, whereby the long optical fiber is fixed in the long capillary tube.

23. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein a heat-curing adhesive is filled in the inner hole of the long capillary tube, and wherein after inserting a long optical fiber whose covering has been removed into the inner hole of the long capillary tube through the flare portion,

the adhesive is cured by heating, whereby the long optical fiber is fixed in the long capillary tube.

24. A method for manufacturing a preliminary member of an optical device component with optical fiber as set forth in Claim 13, wherein the long capillary tube is made of crystallized glass which allows, at a thickness of 1mm, light having a wavelength of 700nm-2500nm to penetrate therethrough at 30% or more, and wherein an adhering failure to the optical fiber is inspected by irradiating light having a wavelength of 700nm-2500nm to the long capillary tube with optical fiber fixed in the inner hole thereof with the adhesive and observing transmitted light or a transmitted image therethrough.

25. An optical fiber stub manufactured by a manufacturing method, the optical fiber stub connected to an optical connector, the method comprising the steps of:

forming softened glass or crystallized glass into a long capillary tube;

inserting and fixing a long optical fiber into an inner hole of the long capillary tube along almost the entire length of the inner hole to manufacture a long capillary tube with optical fiber;

cutting the long capillary tube with optical fiber into a plurality of first capillary tubes with optical fibers each of which has a predetermined length; and

polishing end faces of the first capillary tube with optical fiber.

26. An optical fiber stub as set forth in Claim 25, wherein the end faces of the first capillary tube with optical fiber is PC-polished.

27. An optical fiber stub as set forth in Claim 26, wherein one end face of the first capillary tube with optical fiber is PC-polished and the other end face is polished so as to be an inclined surface which forms an angle of 0-30° with respect to a surface perpendicular to the central axis of the first capillary tube.

28. An optical fiber stub as set forth in Claim 26, wherein the method further comprises the steps of:

PC-polishing the end faces of the first capillary tube with optical fiber;

cutting the first capillary tube with optical fiber at inclined surfaces each of which forms an angle of 0-30° with

respect to a surface perpendicular to the central axis of the first capillary tube, whereby manufacturing second and third capillary tubes with optical fiber each of which has a predetermined length; and

polishing the inclined surfaces of the second and third capillary tubes with optical fiber.

29. An optical fiber stub as set forth in Claim 25, wherein a coefficient of linear expansion of the long capillary tube is less than $7 \times 10^{-7}/K$.

30. An optical fiber stub as set forth in Claim 25, wherein a compressive stress layer is formed on the surface of the long capillary tube by a quenching method or an ion exchanging method.

31. An optical fiber stub as set forth in Claim 25, wherein the long capillary tube is made of glass or crystallized glass which allows, at a thickness of 1mm, light having a wavelength of 350nm-500nm to penetrate therethrough at 50% or more, and wherein the adhesive is a photo-curing adhesive, the adhesive being cured by exposure to light.

32. An optical fiber stub as set forth in Claim 25, wherein

the long capillary tube is made of crystallized glass which allows, at a thickness of 1mm, light having a wavelength of 700nm-2500nm to penetrate therethrough at 30% or more, and wherein an adhering failure to the optical fiber is inspected by irradiating light having a wavelength of 700nm-2500nm to the long capillary tube with optical fiber fixed in the inner hole thereof with the adhesive and observing transmitted light or a transmitted image therethrough.